**AMALINE D-LOW ENERGY OPTION FOR POTABLE WATER**

Berson AmaLine D systems are designed to be a low energy option for the potable water market.

- By utilising amalgam lamps and a patented inlet reactor configuration, an energy efficient system, combined with low head loss, provides for an optimised design.
- The unit is provided with automatic wiping to extend lamp life.
- A single operator can perform all maintenance requirements without the need for additional equipment or support.

<table>
<thead>
<tr>
<th>KEY FEATURES</th>
<th>WHAT IT GIVES YOU</th>
<th>BENEFITS FOR YOU</th>
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</thead>
<tbody>
<tr>
<td>Easy maintenance</td>
<td>Simple extending support arms to allow for quartz sleeve and wiper blade replacement</td>
<td>Single operator can quickly and easily carry out the maintenance without requiring external lifting equipment</td>
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<tr>
<td>Improve operator safety with patented lamp connector</td>
<td>Lamp orientation is fixed ensuring easy and safe installation and optimum performance</td>
<td>Simple, quick and safe lamp changes that self-align, allowing for minimum downtime and assurance of optimal system operation. Operator friendly design</td>
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<td>Lamp cannot be removed while chamber is energised</td>
<td>Protects operator from harm during lamp changes</td>
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<tr>
<td></td>
<td>Lamp connector cannot be removed from pressurised system in the event of a broken sleeve</td>
<td>Protects operator from harm during servicing</td>
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<td>Optimised design</td>
<td>Efficient chamber design using CFD modelling, optimises lamp(s) positioned in chamber</td>
<td>Ensures peak energy efficiency from the optimum distribution of intensity throughout the chamber, providing effective treatment</td>
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<td>Low pressure, high intensity, amalgam lamp technology with variable output ballasts (50 to 100%) provides low energy UV disinfection</td>
<td>Optimised power use for energy saving, low running temperature and greater lamp life</td>
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<td>L shape chamber design, provides effective treatment of potable water and easy installation</td>
<td>Provides efficient treatment, and can be integrated easily into existing pipework</td>
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</table>
**UV CHAMBER**

**Material:** Stainless steel 316L / 1.4404

**Internal finish:** < 0.8 µm Ra, welds as laid

**External finish:** Brushed to K280

**Process ( mating) connections:** Flange EN 1092-1 PN16

**Drain connection:** BSP

**End plate:** Removable end plate

**Degree of protection:** IP45 equivalent to NEMA 12 but not for outside use

**Arc tube (lamp):** Low pressure amalgam

**Arc tube enclosure:** Pure quartz

**Number of lamps:** 4 (D 800), 6 (D 1400), 12 (D 2500)

**Expected lamp life:** 9000 hours

**Wiper:** Automatic (electrically operated)

**UV monitor:** Dry DVGW compliant UV sensor

**Working fluid temperature:** 5°C to 35°C

**Hydrostatically pressure tested:** Yes to 15 bar except D 2500 tested to 7 bar

**Chamber mounting:** Horizontal only

**Seals:** EPDM, ADI free, EC 1935/2004, FDA 21 CFR 177.2600 approved

**CABINET**

**Material:** Polyester coated carbon steel RAL 7035

**Degree of protection:** IP54 NEMA 12 indoor use only

**Supply voltages (nominal):** 230/400 V ± 10% 3L + N 50/60 Hz

**Operating temperature range:** 5°C to 40°C

**Relative humidity:** <95% non-condensing

**Cooling fans:** Yes

**Interconnecting cable length:** 10 m cabinet to chamber

**Variable power:** Stepless (50% reduction in lamp output)

**HMI CONTROL**

**Display:** 7" touch screen

**Operating menu:** 3 levels (2 with password protection)

**Fault finding:** Event log

**CUSTOMER OUTPUTS**

4-20 mA passive or active output: UV RED dose, ballast power

VFC outputs: System warning, lamp ready, common trip, system available, local or remote mode

**CUSTOMER INPUTS**

4-20 mA passive or active input: Flow meter and transmittance meter

VFC inputs: Remote stop/start and remote reset

**CUSTOMER COMMUNICATIONS PORT**

Base ethernet port: Ethernet IP class 3

**APPROVALS**

CE marked, UL 508A

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